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Structure search limits have been increased. See HELP SLIMIT for details.

```
=> e 2-pyridinol, 1-ox/cn
                   2-PYRIDINOL, 1-HEXADECYL-1, 2-DIHYDRO-/CN
E1
                   2-PYRIDINOL, 1-HEXADECYL-1, 2-DIHYDRO-, COMPD. WITH DIBENZOYL
E2
             1
                    PEROXIDE (1:1)/CN
             0 --> 2-PYRIDINOL, 1-OX/CN
E3
                   2-PYRIDINOL, 1-OXIDE/CN
E4
             1
                   2-PYRIDINOL, 1-OXIDE, COMPD. WITH DODECYLAMINE/CN
E5
E6
             1
                   2-PYRIDINOL, 1-OXIDE, COMPD. WITH DODECYLAMINE (1:1)/CN
E7
                   2-PYRIDINOL, 1-OXIDE, ION(1-)/CN
             1
                   2-PYRIDINOL, 1-OXIDE, ION(1-), HEXADECYLTRIMETHYLAMMONIUM/CN
E8
             1
                   2-PYRIDINOL, 1-OXIDE, LITHIUM SALT/CN
Ε9
             1
                   2-PYRIDINOL, 1-OXIDE, POTASSIUM SALT/CN
E10
             1
E11
             1
                   2-PYRIDINOL, 1-OXIDE, SODIUM SALT/CN
E12
             1
                   2-PYRIDINOL, 1-OXIDE, ZINC SALT/CN
=> e
             1
                   2-PYRIDINOL, 2,4-BIS(3,5-DIMETHYLPYRROL-2-YL)-1,2-DIHYDRO-6-
E13
                   METHYL-/CN
E14
             1
                   2-PYRIDINOL, 2,4-BIS(4-ETHYL-3,5-DIMETHYLPYRROL-2-YL)-1,2-DI
                   HYDRO-6-METHYL-/CN
                   2-PYRIDINOL, 2-NITROBENZOATE (ESTER)/CN
E15
                   2-PYRIDINOL, 3,3,5,6-TETRACHLORO-2,3,4,5-TETRAHYDRO-/CN
E16
             1
E17
             1
                   2-PYRIDINOL, 3,3,5,6-TETRACHLORO-2,3,4,5-TETRAHYDRO-5-METHYL
                   -/CN
                   2-PYRIDINOL, 3,3,5,6-TETRACHLORO-2,3,4,5-TETRAHYDRO-5-METHYL
E18
             1
                   -, (5S) -/CN
E19
                   2-PYRIDINOL, 3,3,5,6-TETRACHLORO-2,3,4,5-TETRAHYDRO-5-METHYL
             1
                   -2-(TRICHLOROMETHYL)-/CN
E20
             1
                   2-PYRIDINOL, 3,3,5,6-TETRACHLORO-2,3,4,5-TETRAHYDRO-5-METHYL
                   -2-PHENYL-/CN
E21
             1
                   2-PYRIDINOL, 3,4,5,6-TETRACHLORO-/CN
E22
             1
                   2-PYRIDINOL, 3,4,5,6-TETRACHLORO-, 1-OXIDE/CN
E23
                   2-PYRIDINOL, 3,4,5,6-TETRAFLUORO-/CN
             1
E24
                   2-PYRIDINOL, 3,4,5,6-TETRAHYDRO-, ACETATE/CN
=> s e4-e12
             1 "2-PYRIDINOL, 1-OXIDE"/CN
             1 "2-PYRIDINOL, 1-OXIDE, COMPD. WITH DODECYLAMINE"/CN
             1 "2-PYRIDINOL, 1-OXIDE, COMPD. WITH DODECYLAMINE (1:1)"/CN \,
             1 "2-PYRIDINOL, 1-OXIDE, ION(1-)"/CN
             1 "2-PYRIDINOL, 1-OXIDE, ION(1-), HEXADECYLTRIMETHYLAMMONIUM"/CN
             1 "2-PYRIDINOL, 1-OXIDE, LITHIUM SALT"/CN
             1 "2-PYRIDINOL, 1-OXIDE, POTASSIUM SALT"/CN
             1 "2-PYRIDINOL, 1-OXIDE, SODIUM SALT"/CN
             1 "2-PYRIDINOL, 1-OXIDE, ZINC SALT"/CN
```

9 ("2-PYRIDINOL, 1-OXIDE"/CN OR "2-PYRIDINOL, 1-OXIDE, COMPD.

WITH DODECYLAMINE"/CN OR "2-PYRIDINOL, 1-OXIDE, COMPD. WITH DODECYLAMINE (1:1)"/CN OR "2-PYRIDINOL, 1-OXIDE, ION(1-)"/CN OR

L1

"2-PYRIDINOL, 1-OXIDE, ION(1-), HEXADECYLTRIMETHYLAMMONIUM"/CN OR "2-PYRIDINOL, 1-OXIDE, LITHIUM SALT"/CN OR "2-PYRIDINOL, 1-OXIDE, POTASSIUM SALT"/CN OR "2-PYRIDINOL, 1-OXIDE, SODIUM SALT"/CN OR "2-PYRIDINOL, 1-OXIDE, ZINC SALT"/CN)

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=> s 11

EXCEEDS MAXIMUM FIELD LENGTH, WILL BE SEARCHED AS '2-PYRIDINOL, 1-OXIDE, ION(1-), HEXADECYLTRIMETHYLAMMO/CN'

EXCEEDS MAXIMUM FIELD LENGTH, WILL BE SEARCHED AS '2-PYRIDINOL, 1-OXIDE, ION(1-), HEXADECYLTRIMETHYLAMMO/CN' L2 67 L1

- => s (2-pyridinol or 2-hydroxypyridine) (a) (n-oxide or 1-oxide)
 - 4 FILES SEARCHED...
- L3 121 (2-PYRIDINOL OR 2-HYDROXYPYRIDINE) (A) (N-OXIDE OR 1-OXIDE)
- => s (2-pyridinol or 2-hydroxypyridine) (w) (n-oxide or 1-oxide)
 - 4 FILES SEARCHED...
- L4 117 (2-PYRIDINOL OR 2-HYDROXYPYRIDINE) (W) (N-OXIDE OR 1-OXIDE)
- => s 12 or 13
- L5 146 L2 OR L3
- => dup rem 15

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L6 117 DUP REM L5 (29 DUPLICATES REMOVED)

- => s 16 not (py=2000 or py=2001)
- L7 101 L6 NOT (PY=2000 OR PY=2001)
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- L7 ANSWER 1 OF 101 MEDLINE
- TI Comparison of the effects of pyridine and its metabolites on rat liver and kidney.
- L7 ANSWER 2 OF 101 MEDLINE
- TI Chelators affecting iron absorption in mice.
- L7 ANSWER 3 OF 101 MEDLINE
- TI ***2*** ***Hydroxypyridine*** ***N*** ***oxides*** : effective new chelators in iron mobilisation.
- L7 ANSWER 4 OF 101 MEDLINE
- TI Iron mobilisation from lactoferrin by chelators at physiological pH.
- L7 ANSWER 5 OF 101 BIOSIS COPYRIGHT 2001 BIOSIS
- TI Substrate, substrate analogue and inhibitor interactions with the ferrous active site of catechol 2,3-dioxygenase monitored through XAS studies.
- L7 ANSWER 6 OF 101 BIOSIS COPYRIGHT 2001 BIOSIS
- TI Vanadium(IV) and oxovanadium(IV) complexes of hydroxamic acids and related ligands.
- L7 ANSWER 7 OF 101 BIOSIS COPYRIGHT 2001 BIOSIS
- TI INTERACTIONS OF ***2*** ***HYDROXYPYRIDINE*** ***N*** ***OXIDE*** WITH BIOLOGICAL CATIONS CALCIUM MAGNESIUM ZINC MANGANESE.
- L7 ANSWER 8 OF 101 BIOSIS COPYRIGHT 2001 BIOSIS
- TI PROTO CATECHUATE 3 4 DI OXYGENASE EC-1.13.11.3 COMPARATIVE STUDY OF INHIBITION AND ACTIVE SITE INTERACTIONS OF PYRIDINE N OXIDES.
- L7 ANSWER 9 OF 101 BIOSIS COPYRIGHT 2001 BIOSIS
- PROTO CATECHUATE 3 4 DI OXYGENASE MECHANISTIC IMPLICATIONS OF INHIBITION BY THE TRANSITION STATE ANALOG 2 HYDROXY ISO NICOTINIC-ACID N OXIDE.
- L7 ANSWER 10 OF 101 BIOSIS COPYRIGHT 2001 BIOSIS
- TI STUDIES ON 1 3 BENZOXAZINES 3. REACTION OF IMIDOYL CHLORIDES OF 1 3 BENZOXAZINES WITH 2 HYDROXY PYRIDINE N OXIDE OR 2 MERCAPTO PYRIDINE N OXIDE A NOVEL SULFUR NITROGEN BOND FORMATION VIA ELECTRO CYCLIC REARRANGEMENT.
- L7 ANSWER 11 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Towards the reaction mechanism of pyrogallol-phloroglucinol transhydroxylase of Pelobacter acidiqallici

- L7 ANSWER 12 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Equilibrium studies on copper(II) and iron(III) monohydroxamates
- L7 ANSWER 13 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Alkyl transfer with retention and inversion of configuration: reexamination of a putative [1s,4s] sigmatropic rearrangement
- L7 ANSWER 14 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Heat-developable image-recording element
- L7 ANSWER 15 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Image-recording element
- L7 ANSWER 16 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Liquid propellant XM46 stability enhancement
- L7 ANSWER 17 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Laundry pretreatment with peroxide bleaches containing chelators for iron, copper or manganese for reduced fabric damage
- L7 ANSWER 18 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Photochemistry of N-Hydroxy-2(1H)-pyridone, a More Selective Source of Hydroxyl Radicals Than N-Hydroxypyridine-2(1H)-thione
- L7 ANSWER 19 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Thiapyran formation via an unexpected thioaldehyde intermediate by the thermal decomposition of phenacyl sulfoxides bearing some heterocycles
- L7 ANSWER 20 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Carbodiimide-Mediated Amide Formation in a Two-Phase System. A High-Yield and Low-Racemization Procedure for Peptide Synthesis
- L7 ANSWER 21 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Structure and kinetics of pyridine N-oxide thermal degradation
- L7 ANSWER 22 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Structure-activity relationship of ligands of uracil phosphoribosyltransferase from Toxoplasma gondii
- L7 ANSWER 23 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Minoxidil analogs as inhibitors of cell proliferation and lysyl hydroxylase
- L7 ANSWER 24 OF 101 CAPLUS COPYRIGHT 2001 ACS
- ${\tt TI}$ An ab initio study of the tautomeric equilibria of the N-oxides of hydroxypyridines in the vapor phase
- L7 ANSWER 25 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Synergistic wood preservative compositions comprising phenol and pyrithione derivatives
- L7 ANSWER 26 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Preservation of diagnostic test reagents and kits
- L7 ANSWER 27 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Cosmetic preservative reference materials

- ANSWER 28 OF 101 CAPLUS COPYRIGHT 2001 ACS L7
- Structure-activity relationship of minoxidil analogs as inhibitors of lysyl hydroxylase in cultured fibroblasts
- L7
- ANSWER 29 OF 101 CAPLUS COPYRIGHT 2001 ACS
 Interactions of ***2*** ***hydroxypyridine*** ***N*** -TΙ ***oxide*** with biological cations (calcium(2+), magnesium(2+), zinc(2+) manganese(2+)...)
- ANSWER 30 OF 101 CAPLUS COPYRIGHT 2001 ACS L7
- A proton and carbon-13 NMR and x-ray diffraction study of the tautomerism TI of 2-hydroxy- and 2,3-dihydroxypyridine N-oxides. X-ray molecular ***2*** - ***hydroxypyridine*** structure of ***oxide***
- ANSWER 31 OF 101 CAPLUS COPYRIGHT 2001 ACS T.7
- ΤI Wood preservatives
- ANSWER 32 OF 101 CAPLUS COPYRIGHT 2001 ACS L7
- Synergistic wood preservatives comprising quaternary ammonium compounds TΤ and pyridine N-oxide derivatives
- ANSWER 33 OF 101 CAPLUS COPYRIGHT 2001 ACS L7
- TT Iron chelators
- ANSWER 34 OF 101 CAPLUS COPYRIGHT 2001 ACS L7
- Free radical and cytotoxic effects of chelators and their iron complexes in the hepatocyte
- ANSWER 35 OF 101 CAPLUS COPYRIGHT 2001 ACS L7
- TΙ Mobilization of plutonium and iron from transferrin and ferritin by hydroxypyridone chelators
- ANSWER 36 OF 101 CAPLUS COPYRIGHT 2001 ACS L7
- Molecular orbital study of some aromatic N-oxide systems ΤI
- 1.7 ANSWER 37 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Ligands for metalizable dyes
- L7 ANSWER 38 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TΙ Isomeric methoxypyridine 1-oxides and 1-methoxypyridones: electronic spectra and structure
- L7 ANSWER 39 OF 101 CAPLUS COPYRIGHT 2001 ACS
- [170] water and nitric oxide binding by protocatechuate 4,5-dioxygenase and ΤI catechol 2,3-dioxygenase. Evidence for binding of exogenous ligands to the active site iron of extradiol dioxygenases
- ANSWER 40 OF 101 CAPLUS COPYRIGHT 2001 ACS L7
- ΤI Pyridine oxide deriative pharmaceuticals and cosmetics with reduced toxicity
- L7ANSWER 41 OF 101 CAPLUS COPYRIGHT 2001 ACS
- ***2*** -Feed compositions containing copper salts of ***hydroxypyridine*** - ***N*** - ***oxides***
- T.7 ANSWER 42 OF 101 CAPLUS COPYRIGHT 2001 ACS

- TI Lanthanide and actinide complexes with bidentate ligands. Crystal structure of dimethylformamidetetrakis(1-oxo-2-thiopyridinato)thorium(IV)
- L7 ANSWER 43 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI The reduction of aliphatic and aromatic N-oxides to the corresponding amines with titanium(III) chloride
- L7 ANSWER 44 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Lanthanide and actinide complexes with bidentate ligands. Crystal structure of dimethylformamidetetrakis(1-oxo-2-thiopyridinato)thorium(IV)
- L7 ANSWER 45 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Structural studies of organoboron compounds. XVIII. Crystal and molecular structures of 2,2-diphenyl-1,3-dioxa-3a-azonia-2-borataindan and 4-cyclohexyl-6-methyl-2,2-diphenyl-1,3-dioxa-3a-azonia-2-borataindan
- L7 ANSWER 46 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Uranyl complexes with bidentate derivatives of pyridine N-oxide. The crystal structure of (dimethyl sulfoxide)bis(1-oxo-2-thiopyridinato)dioxouranium(VI) and aquabis(1,2-dioxopyridinato)dioxouranium(VI) monohydrate
- L7 ANSWER 47 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Boron chelates of 2-hydroxy- and 2-mercaptopyridine N-oxides
- L7 ANSWER 48 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Softening agent and treatment of textiles after washing
- L7 ANSWER 49 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Metal complexes of the 2-hydroxy derivative of pyridine N-oxide
- L7 ANSWER 50 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Photoelectron-determined core binding energies and predicted gas-phase basicities for the 2-hydroxypyridine .dblarw. 2-pyridone system
- L7 ANSWER 51 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Isolation and characterization of a silicon-organic complex from plants
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- TI Dialkyltin salts of 2-(mercapto or hydroxy)pyridine oxide
- L7 ANSWER 53 OF 101 CAPLUS COPYRIGHT 2001 ACS
- ${\tt TI}$ Nitrogen-14 nuclear magnetic resonance of some monosubstituted pyridine N-oxides
- L7 ANSWER 54 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Bonding state of penta- and hexacoordinate silicon in cationic and anionic o-arylenedioxy chelates
- L7 ANSWER 55 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Dialkyltin salts of substituted pyridine-1-oxides
- L7 ANSWER 56 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Dialkyltin salts of substituted pyridine 1-oxides as fungicides and bactericides
- L7 ANSWER 57 OF 101 CAPLUS COPYRIGHT 2001 ACS

- TI Polyhaloaromatic compounds. XVIII. Grignard reactions on pentachloropyridine 1-oxide
- L7 ANSWER 58 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI 4-Cyano- ***2*** ***hydroxypyridine*** ***1*** ***oxide***
- L7 ANSWER 59 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI 4-Substitutes 2-hydroxy-5-nitropyridine 1-oxides
- L7 ANSWER 60 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI ***2*** ***Hydroxypyridine*** ***1*** ***oxide***
 derivatives
- L7 ANSWER 61 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI 2-Hydroxy-4-acylaminopyridine 1-oxides
- L7 ANSWER 62 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI 4-Alkoxy- ***2*** ***hydroxypyridine*** ***1*** ***oxides***
- L7 ANSWER 63 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI 4-Carbamoyl 1- ***2*** ***hydroxypyridine*** ***1*** ***oxide***
- L7 ANSWER 64 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI 4-Amino- ***2*** ***hydroxypyridine*** ***1*** ***oxide***
- L7 ANSWER 65 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI 4-Alkoxy- ***2*** ***hydroxypyridine*** ***1*** ***oxide***
- L7 ANSWER 66 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI 4-Ethoxycarbonyl 1- ***2*** ***hydroxypyridine*** ***1*** ***oxide***
- L7 ANSWER 67 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Establishment and treatment of cutaneous Candida albicans infection in the rabbit
- L7 ANSWER 68 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Fungicidal pharmaceutical compositions
- L7 ANSWER 69 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Hydroxypyridine oxides as antifungal agents
- L7 ANSWER 70 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Studies on hydrogenolysis. XLV. Selectivity of catalysts and effect of additives. 12. Selectivity of catalysts in hydrogenation of pyridine derivatives
- L7 ANSWER 71 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Separation of the Si complex of ***2*** ***hydroxypyridine***

 N ***oxide*** into optical antipodes. An evidence for the octahedral coordination around Si
- L7 ANSWER 72 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Structure and behavior of organic analytical reagents. Formation constants of transition metal complexes of ***2*** ***hydroxypyridine***

 1 ***oxide*** and 2-mercaptopyridine 1-oxide

- L7 ANSWER 73 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Water resistant cationic silicon complexes of ***2*** **hydroxypyridine*** ***N*** ***oxide***
- L7 ANSWER 74 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Glycosides from heterocycles. II. Glucosides from hydroxypyridine-N-oxides
- L7 ANSWER 75 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI A possible mode of action of some antifungal and antibacterial chelating agents
- L7 ANSWER 76 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI N-Oxides and related compounds. V. The tautomerism of 2- and 4-amino- and -hydroxy pyridine 1-oxide
- L7 ANSWER 77 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Bromination and nitration of ***2*** ***hydroxypyridine***

 N ***oxide***
- L7 ANSWER 78 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI ***2*** ***Hydroxypyridine*** ***1*** ***oxide*** and homologs
- L7 ANSWER 79 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI The directive influence of the N-oxide group during the nitration of derivatives of pyridine N-oxide. III. The nitration of 2- and 3-methoxypyridine N-oxide
- L7 ANSWER 80 OF 101 CAPLUS COPYRIGHT 2001 ACS
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- L7 ANSWER 81 OF 101 CAPLUS COPYRIGHT 2001 ACS
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- L7 ANSWER 82 OF 101 CAPLUS COPYRIGHT 2001 ACS
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- L7 ANSWER 83 OF 101 CAPLUS COPYRIGHT 2001 ACS
- TI Hydroxamic acids. I. Cyclic hydroxamic acids derived from pyridine and quinoline
- L7 ANSWER 84 OF 101 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
- TI New orally active iron chelators.
- L7 ANSWER 85 OF 101 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
- TI [Ligation of the internal maxillary artery in a case of epistaxis uncontrollable by the habitual methods].

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- L7 ANSWER 86 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI Fungicidal water soluble wood preservative contg. salt of 2-hydroxy pyridine, amino cpd. and copper salt.

- L7 ANSWER 87 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI Synergistic wood preservative compsns. contg. 2-mercapto- or 2-hydroxy-pyridine N-oxide and quat. ammonium-salts.
- L7 ANSWER 88 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI 1-Hydroxy pyrid-2-one derivs. used for removal of excess body iron or treatment of anaemia.
- L7 ANSWER 89 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI Sodium and zinc pyrithione prodn. by reacting sodium hydrosulphide and base with 2-halo pyridine-N-oxide then heating and opt. reacting with zinc salt.
- L7 ANSWER 90 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI Synthesis of 4 substd 2 hydroxy 5 nitro pyridene 1 oxides having antimicrobial activity.
- L7 ANSWER 91 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI 4-cyano-2-hydroxypiridine 1-oxide antifungal agent.
- L7 ANSWER 92 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI ***2*** ***hydroxypyridine*** ***1*** ***oxide*** derivs antibacterial.
- L7 ANSWER 93 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI 4-acetamido- ***2*** ***hydroxypyridine*** ***1*** ***oxide*** preparation antimicrobial.
- L7 ANSWER 94 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI ***2*** ***hydroxypyridine*** ***1*** ***oxide*** derivs antibacterial.
- L7 ANSWER 95 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI 4-acetamido- ***2*** ***hydroxypyridine*** ***1*** ***oxide*** preparation antimicrobial.
- L7 ANSWER 96 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI 4-alkoxy- ***2*** ***hydroxypyridine*** ***1*** ***oxides*** antibacterials.
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- TI 4-alkoxycarbonyl- ***2*** ***hydroxypyridine*** ***1*** ***oxides***
- L7 ANSWER 98 OF 101 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
- TI Antimicrobial 4-carbamoyl- ***2*** ***hydroxypyridine*** ***1***
 oxide .
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- TI Antibacterial 4-alkoxy- ***2*** ***hydroxypyridine*** ***1*** ***oxide*** .
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- TI Antibacterial 4-amino- ***2*** ***hydroxypyridine*** ***1*** ***oxide*** .
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Fungicidal ***2*** - ***hydroxypyridine*** - ***1*** -
ΤI
       ***oxides*** .
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\Rightarrow s 17 bib abs 1-7,23,29,33,34,40,49,60,74,80
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The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.
\Rightarrow d 17 bib abs 1-7,23,29,33,34,40,49,60,74,80
L7
     ANSWER 1 OF 101 MEDLINE
                  MEDLINE
AN
     96234254
                PubMed ID: 8644130
DN
     96234254
     Comparison of the effects of pyridine and its metabolites on rat liver and
TΙ
     kidney.
ΑU
     Carlson G P
     School of Health Sciences, Purdue University, West Lafayette, IN
CS
     47907-1338, USA.
NC
     ES04362 (NIEHS)
     TOXICOLOGY LETTERS, (1996 Jun) 85 (3) 173-8.
SO
     Journal code: VXN; 7709027. ISSN: 0378-4274.
CY
     Netherlands
     Journal; Article; (JOURNAL ARTICLE)
DT
LA
     English
     Priority Journals
FS
EM
     199607
ED
     Entered STN: 19960726
     Last Updated on STN: 19960726
     Entered Medline: 19960716
     In order to evaluate the possibility that the metabolism of pyridine may
AΒ
     be important for its toxic actions, pyridine was compared with pyridine
      ***N*** - ***oxide*** , ***2*** - ***hydroxypyridine***
     3-hydroxypyridine, 4-hydroxypyridine and pyridinium methyliodide in rats
     given equal molar doses of the chemicals i.p. Hepatoxicity was assessed by
     measuring serum sorbitol dehydrogenase, nephrotoxicity by determining
     increases in blood urea nitrogen and serum creatinine, and influence on
     xenobiotic metabolism by measuring changes in p-nitrophenol hydroxylase
     and ethoxyresorufin and benzyloxyresorufin dealkylase activities. After a
     single dose of 2.5 mmol/kg, pyridinium methyliodide was the only compound
     that was lethal whereas 2-hydroxypyridine was the only one that caused
     significant hepatoxicity. Pyridine, pyridine N-oxide, 3-hydroxypyridine
     and 4-hydroxypyridine were effective inducers of xenobiotic metabolism.
     Thus the metabolites of pyridine may play a role, either singly or
     collectively, in the actions of pyridine.
L7
    ANSWER 2 OF 101 MEDLINE
ΑN
     91248322
                 MEDLINE
DN
     91248322
                PubMed ID: 2095129
ΤI
    Chelators affecting iron absorption in mice.
```

Department of Haematology, Royal Free Hospital School of Medicine, London,

ΑU

CS

UK.

Kontoghiorghes G J.

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ARZNEIMITTEL-FORSCHUNG, (1990 Dec) 40 (12) 1332-5.
     Journal code: 91U; 0372660. ISSN: 0004-4172.
     GERMANY: Germany, Federal Republic of
CY
     Journal; Article; (JOURNAL ARTICLE)
DT
LΑ
     English
FS
     Priority Journals
EΜ
     199107
ED
     Entered STN: 19910719
     Last Updated on STN: 19980206
     Entered Medline: 19910702
AB
     The effect of natural and synthetic chelators on iron (59Fe) absorption in
     mice has been studied in three different experiments using single or
     repeated intragastric administrations of chelator iron (59Fe) complexes of
     different chelator doses. The amount of 59Fe in whole animals, their
     excretions and also distribution of 59Fe in blood, liver, spleen and heart
     was measured at one, three and eight weeks following the 59Fe-chelator
     administrations and compared to controls which received the same amount of
     iron (59Fe) but no chelator. 2-Hydroxy-4-methoxypyridine-1-oxide and
     maltol, which form lipophilic iron complexes, were found to cause an
     increase of 59Fe absorption while other chelators caused a decrease either
     by precipitating iron eg. ***2*** - ***hydroxypyridine*** - ***1***
     - ***oxide*** or by forming non absorbable soluble iron complexes eg.
     desferrioxamine, mimosine, EDTA. 1,2-Dimethyl-3-hydroxypyrid-4-one caused
     a decrease in iron absorption at a high dose (10 mg) by comparison to the
     control group but it did not significantly alter iron absorption at a
     lower dose (2 mg). It is suggested that natural and synthetic iron
     chelating compounds influence the absorption of iron and some may have a
     use in the treatment of diseases associated with gastro-intestinal iron
     absorption imbalance.
     ANSWER 3 OF 101 MEDLINE
L7
     87157804 MEDLINE
ΑN
     87157804 PubMed ID: 3828392
DN
       ***2*** - ***Hydroxypyridine*** - ***N*** - ***oxides*** :
TΙ
     effective new chelators in iron mobilisation.
ΑU
     Kontoghiorghes G J
     BIOCHIMICA ET BIOPHYSICA ACTA, (1987 Apr 16) 924 (1) 13-8.
SO
     Journal code: AOW; 0217513. ISSN: 0006-3002.
CY
     Netherlands
DT
     Journal; Article; (JOURNAL ARTICLE)
LA
     English
FS
     Priority Journals
EΜ
     198705
ED
     Entered STN: 19900303
     Last Updated on STN: 19970203
     Entered Medline: 19870521
     The ***2*** - ***hydroxypyridine*** - ***N*** - ***oxide***
AB
                  ***2*** - ***hydroxypyridine*** - ***N***
     derivatives,
       ***oxide*** , 2,4-dihydroxypyridine-N-oxide, 2-hydroxy-4-
methoxypyridine-
     N-oxide and 2-hydroxy-4-(2'-methoxyethoxy)pyridine-N-oxide have been shown
     to remove iron from human transferrin and horse spleen ferritin at pH 7.4
     at levels higher than those caused by desferrioxamine. Their reactions
     with transferrin were mainly biphasic and took 2-5 h to reach completion
     but iron mobilisation from ferritin was slower and their reactions
     continued after 40 h of incubation. The intraperitoneal and intragastric
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administration of 2,4-dihydroxypyridine-N-oxide to two iron-loaded

59Fe-labelled mice caused an increase in 59Fe excretion which is comparable to that caused by desferrioxamine intraperitoneally. These results increase the prospects for the use of these chelators as probes for studying iron metabolism and in the treatment of iron overload and other diseases of iron imbalance.

- L7 ANSWER 4 OF 101 MEDLINE
- AN 86216301 MEDLINE
- DN 86216301 PubMed ID: 3708002
- TI Iron mobilisation from lactoferrin by chelators at physiological pH.
- AU Kontoghiorghes G J
- SO BIOCHIMICA ET BIOPHYSICA ACTA, (1986 Jun 19) 882 (2) 267-70. Journal code: AOW; 0217513. ISSN: 0006-3002.
- CY Netherlands
- DT Journal; Article; (JOURNAL ARTICLE)
- LA English
- FS Priority Journals
- EM 198607
- ED Entered STN: 19900321 Last Updated on STN: 19970203 Entered Medline: 19860724
- AB Several alpha-ketohydroxypyridine, ***2*** ***hydroxypyridine***

 N ***oxide*** and 8-hydroxyquinoline chelators were shown to mobilise iron from diferric 59Fe-labelled human lactoferrin at physiological pH without the use of mediators or reducing agents.

 1,2-Dimethyl-3-hydroxypyrid-4-one was found to be the most effective chelator, removing 90% of 59Fe from [59Fe]lactoferrin, in contrast to desferrioxamine, which was ineffective under the same conditions.
- L7 ANSWER 5 OF 101 BIOSIS COPYRIGHT 2001 BIOSIS
- AN 1994:504817 BIOSIS
- DN PREV199497517817
- TI Substrate, substrate analogue and inhibitor interactions with the ferrous active site of catechol 2,3-dioxygenase monitored through XAS studies.
- AU Bertini Vvano, Fabrizio Briganti; Mangani, Stefano; Nolting, Hans F.; Scozzafava, Andrea (1)
- CS (1) Dip. Chim., Univ. Firenze, Via Gino Capponi 7, I-50121 Firenze Italy
- SO FEBS Letters, (1994) Vol. 350, No. 2-3, pp. 207-212. ISSN: 0014-5793.
- DT Article
- LA English
- AB The interactions of catechol (substrate). 2-hydroxy-pyridine-N-oxide (substrate analogue), and 2-bromophenol (inhibitor) with the extradiol cleaving catechol-2,3-dioxygenase from Pseudomonas putida mt-2 have been monitored through X-ray absorption spectroscopy (XAS). The analysis of the data provides details about the mode of coordination of the substrate and of the inhibitors to the active site of the enzyme.
- L7 ANSWER 6 OF 101 BIOSIS COPYRIGHT 2001 BIOSIS
- AN 1993:160778 BIOSIS
- DN PREV199395081828
- TI Vanadium(IV) and oxovanadium(IV) complexes of hydroxamic acids and related ligands.
- AU Dessi, Alessandro; Micera, Giovanni (1); Sanna, Daniele; Erre, Liliana Strinna
- CS (1) Dep. Chem., Univ. Sassari, Via Vienna 2, 07100 Sassari Italy
- SO Journal of Inorganic Biochemistry, (1992) Vol. 48, No. 4, pp. 279-287.

ISSN: 0162-0134.

- DT Article
- LA English
- AB Complex formation between oxovanadium(IV) and a series of hydroxamic or hydroxamic-like ligands (acetohydroxamic, benzohydroxamic, ***2*** ***hydroxypyridine*** ***N*** ***oxide*** and N-phenyl-benzohydroxamic acids) has been investigated in solution by EPR spectroscopy. VO(IV) complexes involving the ligand-to-metal molar ratio of 2:1 have also been isolated in the solid state. The results show that the simple hydroxamic ligands (acetohydroxamic and benzohydroxamic acids) can undergo two deprotonation processes and thus act as either hydroxamato(1-) or hydroximato(2-) ligands. A similar dissociation pattern is not possible for N-phenyl-benzohydroxamic acid and the hydroxamic-like ligand ***2*** ***hydroxypyridine*** ***N*** ***oxide*** , which are able to yield only a hydroxamato(1-) coordinating anion. All the ligands form hexa-coordinate tris-chelated complexes of V(IV) after displacing the oxo group from VO(IV).
- L7 ANSWER 7 OF 101 BIOSIS COPYRIGHT 2001 BIOSIS
- AN 1990:484493 BIOSIS
- DN BR39:108514
- TI INTERACTIONS OF ***2*** ***HYDROXYPYRIDINE*** ***N*** ***OXIDE*** WITH BIOLOGICAL CATIONS CALCIUM MAGNESIUM ZINC MANGANESE.
- AU DEIDA M F; PIERRARD J C; RIMBAULT J
- CS UNIV. DE REIMS CHAMPAGNE-ARDENNE, FAC. DES SCI., LAB. DE CHIMIE MINERALE, BP 347, 51062 REIMS CEDEX, FR.
- SO FIRST INTERNATIONAL SYMPOSIUM ON METAL IONS IN BIOLOGY AND MEDICINE, MAY 16-19, 1990. TRACE ELEM MED. (1990) 7 (2), 101. CODEN: TEMDE6. ISSN: 0174-7371.
- DT Conference
- FS BR; OLD
- LA English
- L7 ANSWER 23 OF 101 CAPLUS COPYRIGHT 2001 ACS
- AN 1994:570582 CAPLUS
- DN 121:170582
- TI Minoxidil analogs as inhibitors of cell proliferation and lysyl hydroxylase
- IN Murad, Saood; Pinnell, Sheldon R.
- PA Duke University, USA
- SO U.S., 15 pp.
- CODEN: USXXAM
- DT Patent
- LA English
- FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|

- PI US 5328913 A 19940712 US 1992-987952 19921211
- AB A method of inhibiting cell proliferation and lysyl hydroxylase expression by using minoxidil derivs. and analogs is decribed. The inhibitory activity of hydroxy derivs. of minoxidil is such that these compds. can be used as selective antifibrotic agents. Minoxidil and some analogs inhibited the activity of lysyl hydroxylase comparable to the parent drug and some others did not.
- L7 ANSWER 29 OF 101 CAPLUS COPYRIGHT 2001 ACS
- AN 1991:215665 CAPLUS

- DN 114:215665
- TI Interactions of ***2*** ***hydroxypyridine*** ***N***
 oxide with biological cations (calcium(2+), magnesium(2+),
 zinc(2+) manganese(2+)...)
- AU Deida, M. F.; Pierrard, J. C.; Rimbault, J.
- CS Fac. Sci., Univ. Reims, Reims, 51062, Fr.
- SO Met. Ions Biol. Med., Proc. Int. Symp., 1st (1990), 567-9. Editor(s): Collery, Philippe. Publisher: Libbey, Paris, Fr. CODEN: 56ZJAL
- DT Conference
- LA English
- AB Coordination of Ca, Mg, Mn, Zn and Ni with the title ligand was studied at 25.degree. in 1M (NaClO4) soln. by a potentiometric method. Stability consts. of the complexes are given. The order of stability of the complexes vary with the nature of the metal ion as follows: Ca2+ < Mg2+ < Mn2+ < Zn2+ .apprxeq. Ni2+. The ionization const. of the ligand was also calcd.
- L7 ANSWER 33 OF 101 CAPLUS COPYRIGHT 2001 ACS
- AN 1989:108140 CAPLUS
- DN 110:108140
- TI Iron chelators
- AU Mostert, L. J.; Koster, J. F.; Van Eijk, H. G.
- CS Med. Fac., Erasmus Univ., Rotterdam, 300 DR, Neth.
- SO Tijdschr. Ned. Ver. Klin. Chem. (1988), 13(6), 211-14 CODEN: TNVCE9; ISSN: 0168-8472
- DT Journal
- LA Dutch
- AB In a comparative screening study of chelators intended for clin. use, 11 Fe chelators have been tested for their ability to mobilize 59Fe from 59Fe-labeled ferritin and from rat hepatocytes labeled with 59Fe-transferrin. The toxic effects of the chelators were also studied using microsomal lipid peroxidn. induced by Fe3+/ADP and NADPH. Mimosine and 1,2-dimethyl-3-hydroxypyridin-4-one were the most effective chelators in iron mobilization and did not catalyze lipid peroxidn. Besides investigating the iron-binding capacity of new chelators, their ability to catalyze lipid peroxidn. has to be ruled out.
- L7 ANSWER 34 OF 101 CAPLUS COPYRIGHT 2001 ACS
- AN 1987:629106 CAPLUS
- DN 107:229106
- TI Free radical and cytotoxic effects of chelators and their iron complexes in the hepatocyte
- AU Mostert, L. J.; Van Dorst, J. A. L. M.; Koster, J. F.; Van Eijk, H. G.; Kontoghiorghes, G. J.
- CS Dep. Chem. Pathol. Biochem. I, Erasmus Univ., Rotterdam, Neth.
- SO Free Radical Res. Commun. (1987), 3(6), 379-88 CODEN: FRRCEX; ISSN: 8755-0199
- DT Journal
- LA English
- AB In a comparative screening study of chelators intended for clin. use eleven iron chelators have been tested for their ability to mobilize 59Fe from 59Fe-labeled ferritin and from hepatocytes of rats labeled with 59Fe-transferrin. The toxic effects of the chelators were also studied using microsomal lipid peroxidn. induced by Fe3+/ADP and NADPH. From these tests it was shown that 1,2-di-Me 3-hydroxypyrid-4-one (L1) and mimosine were the most effective Fe chelators in Fe mobilization and did

not catalyze lipid peroxidn. Thus, aside from their Fe binding properties, chelators should be examd. for their role in catalyzing lipid peroxidn. in toxicol. screening.

- L7 ANSWER 40 OF 101 CAPLUS COPYRIGHT 2001 ACS
- AN 1985:172662 CAPLUS
- DN 102:172662
- TI Pyridine oxide deriative pharmaceuticals and cosmetics with reduced toxicity
- IN Gari, Kailash Kumar
- PA Paninkret Chemisch Pharmazeutisches Werk G.m.b.H., Fed. Rep. Ger.
- SO Ger. Offen., 18 pp. CODEN: GWXXBX
- DT Patent
- LA German
- FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|

- PI DE 3327485 A1 19850214 DE 1983-3327485 19830729
- AB The toxicity of cosmetics and pharmaceuticals contg. 2-mercaptopyridine N-oxide [1121-31-9] or ***2*** - ***hydroxypyridine*** ***oxide*** [***13161-30-3***] or their salts is decreased by the addn. of a proteolyzate of plant or animal origin at a ratio of 0.5-20 parts proteolyzate to 1 part pyridine oxide. Thus, slaughterhouse coagulated blood was sepd. from plasma, dild. with H2O to 10% solids, and mixed with equal parts of pancreatin, papain, and 2 yeast enzymes (10 g/10 L) for 1 h at 35-38.degree., held at 53-57.degree. for 2 h, mixed with a filter aid, heated to 90.degree., and filtered. The filtrate was concd. and spray-dried, suspended in 70% EtOH, and filtered after 8-12 h. EtOH was evapd., and the residue was spray-dried, and optionally dialyzed. A soln. for topical use was prepd. from 100 g Na 2-mercaptopyridine N-oxide [15922-78-8] and 600 g of the blood hydrolyzate in 1 L 60% iso-PrOH. effectiveness of the hydrolyzate in decreasing the retinal toxicity of Na pyridinethione was demonstrated by electroretinogram b wave potentials in dark-adapted rats injected i.p. with the compd. and the hydrolyzate.
- L7 ANSWER 49 OF 101 CAPLUS COPYRIGHT 2001 ACS
- AN 1981:596537 CAPLUS
- DN 95:196537
- TI Metal complexes of the 2-hydroxy derivative of pyridine N-oxide
- AU Landers, Arthur E.; Phillips, David J.
- CS Sch. Chem., Univ. New South Wales, Kensington, 2033, Australia
- SO Inorg. Chim. Acta (1981), 51(1), 109-15 CODEN: ICHAA3; ISSN: 0020-1693
- DT Journal
- LA English
- AB Cu(opo)2 (Hopo = 1-hydroxy-2-pyridone, the tautomeric form of ***2*** ***hydroxypyridine*** ***N*** ***oxide***), Cu(opo)NO3.H2O, Cu(opo)Br.0.5MeOH, Cu(opo)Cl, Ni(opo)Cl.1.5H2O, Co(opo)Cl.1.5H2O, and Fe(opo)3.H2O were prepd. Structures with bidentate 1-hydroxy-2-pyridone are proposed for the complexes on the basis of measurements of x-ray powder diffraction spectra. Moessbauer, IR and electronic spectra, and magnetic data at >89 K are reported. Cu(opo)Br.0.5MeOH is antiferromagnetic, and its susceptibility data was fitted to various models.
- L7 ANSWER 60 OF 101 CAPLUS COPYRIGHT 2001 ACS

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1970:12596 CAPLUS
ΑN
DN
      ***2*** - ***Hydroxypyridine***
                                         ***1*** - ***oxide***
ΤI
     derivatives
IN
    Minakami, Satoshi; Hirai, Eizo
PA
    Shionogi and Co., Ltd.
     Japan., 2 pp.
SO
    CODEN: JAXXAD
DT
    Patent
LA
    Japanese
FAN.CNT 1
                                       APPLICATION NO. DATE
    PATENT NO.
    TE 44005500
                   KIND DATE
                                         JΡ
    JP 44025582 B4 19691028
PΙ
                                                        19650302
GΙ
    For diagram(s), see printed CA Issue.
    Manuf. of I, useful as a bactericide, is described. In an example, 2.5 g
     4-chloro-2-methoxypyridine 1-oxide is treated with 75 ml AcCl, the mixt.
    evapd. in vacuo, the residual oil heated with 100 ml H2O and 4 ml concd.
    HCl 10 hr, concd. in vacuo, and cooled with ice to give 9 g I (R = Cl), m.
    145-6.degree. (H2O). Similarly prepd. are the following I (R and m.p.
    given): NO2, 169-71.degree.; CO2H, >250.degree..
L7
    ANSWER 74 OF 101 CAPLUS COPYRIGHT 2001 ACS
    1963:409283 CAPLUS
ΑN
    59:9283
DN
OREF 59:1744c-q
    Glycosides from heterocycles. II. Glucosides from hydroxypyridine-N-oxides
ΑU
    Wagner, G.; Pischel, H.
CS
    Karl-Marx Univ., Leipzig, Germany
    Arch. Pharm. (1962), 295, 897-910
SO
DT
    Journal
LA
    Unavailable
AΒ
    cf. CA 58, 4642b. The glucosides of the tautomers of 2- and
    4-hydroxypyridines were prepd., as well as that from the 3-isomer.
    3-Hydroxypyridine tetra-O-acetyl-.beta.-D-glucopyranoside was converted to
    the N-oxide with PhCO2OH, m. 78-80.degree. (HOAc-petr. ether) [.alpha.]24D
    -40.7 (c 5.1, CHCl8), and deacetylated with NaOMe in MeOH, m.
    212.5-13.5.degree. (decompn.), [.alpha.]22D -93.8.degree. (c 2.6, H2O).
    Similarly were prepd. 4-hydroxypyridine N-oxide tetra-O-acetyl-.beta.-D-
    glucopyranoside, [.alpha.]22D -26.7.degree. (c 2.5, H2O); and
    4-hydroxypyridine N-oxide .beta.-D-glucopyranoside, m. 195-7.degree.,
     [.alpha.]21D -99.4.degree. (c 1.0, H2O). Ag salt of N-hydroxy-2-pyridone
     (1.6 g.) and 3.0 g. (I) tetra-O-acetyl-.alpha.-D-glucopyranosyl bromide
     (I) was boiled in 40 ml. dry PhMe 8 min., filtered while hot, and C6H6
    added to give a white powder, recrystd. from HOAc-petr. ether, m.
    142-3.degree., [.alpha.]22D -132.4.degree. (c 5.0, CHCl3),
    N-hydroxy-2-pyridone tetra-O-acetyl-.beta.-D-qlucopyranoside (II). The Aq
    salt was obtained from ***2*** - ***hydroxypyridine*** ***N***
      ***oxide*** in aq. NaOH with AgNO3. 2-Bromopyridine N-oxide (7 q.) was
    heated on a water bath with 50 ml. 10% NaOH 90 min., cooled, acidified
    with 30% H2SO4 (Congo), evapd. to dryness, the residue extd. with CHCl3,
    and the solvent removed to give 80% crude ***2***
      (EtOAc). II was also prepd. from ***2*** - ***hydroxypyridine***
      ***N*** - ***oxide*** , KOH, and I; and I and 2-ethoxypyridine N-
oxide.
    II sapond. with NaOMe gave 65% N-hydroxy-2-pyridone .beta.-D-
```

glucopyranoside, m. 195.5-6.5.degree. (PrOH), [.alpha.]20D -100.3.degree. (c 2.5, H2O). The Ag salt of 3-hydroxypyridine N-oxide and I in MePh gave a mixt. of 3-hydroxypyridine N-oxide tetra-O-acetyl-.beta.-Dglucopyranoside and the corresponding de-N-oxide. Treatment of the Ag salt from 4-hydroxypyridine N-oxide with I in PhMe gave a mixt. of the two tautomeric derivs. 4-N-hydroxypyridone 4-tetra-O-acetyl-.beta.-Dqlucopyranoside (III) could be isolated from the mixt. by addn. of petr.-ether, soln. in CHCl3, washing with Na2CO3, dropping into petr.-ether, and recrystn. from EtOAc-petr. ether, m. 134-6.degree., [.alpha.]19D -26.2.degree. (c 2.0, CHCl3). Deacetylation gave the glucoside, m. 125-7.degree., [.alpha.]20D -33.1.degree. (c 1.0, H20). 4-Ethoxypyridine N-oxide and I 4 days at 65.degree. gave a mixt. of III and 4-pyridone N-tetra-O-acetyl-.beta.-D-glucopyranoside (IV), identified through paper chromatography of their deacetylated glucosides. I (3 q.) and 3 g. 4-EtO-C5H5N heated in a sealed tube 4 days at 65.degree., dissolved in CHCl3, washed with HOAc, H2O, dried, evapd., and recrystd. from 50 ml. MeOH gave IV, glass, [.alpha.]20D 31.0, (c 5.0, CHCl3). Deacetylation gave an amorphous material contg. 1.5 mols. H2O, [.alpha.]19D 57.7.degree., (c 2.5, H2O). Redn. of 3- and 4-hydroxypyridine N-oxide tetra-O-acetyl-.beta.-D-glucopyranosides in MeOH-Raney-Ni gave the corresponding hydroxypyridines, m. 139-41.degree.; 110-13.degree., resp. A table of Rf values for the compds. discussed is appended.

```
L7
   ANSWER 80 OF 101 CAPLUS COPYRIGHT 2001 ACS
   1951:36244 CAPLUS
ΑN
DN
   45:36244
OREF 45:6224a-f
     TΤ
   homologs
IN
   Shaw, Elliott N.
PΑ
   E. R. Squibb & Sons
DT
   Patent
LA
   Unavailable
FAN.CNT 1
   PATENT NO. KIND DATE
                                APPLICATION NO. DATE
PΙ
   US 2540218
                     19510206
                                 US
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The compds. are antibacterial agents comparable to aspergillic acid. occur also in the tautomeric form as 1-hydroxy-2(1H)-pyridone (I) and derivs. Reflux 2-bromopyridine 70 with PhCH2ONa 60 g. in PhCH2OH 200 cc. 2 hrs., pour into H2O, ext. with Et2O, fractionate in vacuo, and collect 38.5 g. 2-benzyloxypyridine (II), b2 134-5.degree.. Oxidize II 37 g. with 1.5 equivs. BzO2H in 700 cc. CHCl3 at room temp., wash after 3 days with NaHCO3 soln. and H2O, dry with MgSO4, evap. in vacuo, slurry the residue with EtOAc + C6H8, and filter the residue (18 g.) of 2-benzyloxypyridine 1-oxide (III), m. 102-6.degree. (from EtOH), 4.3 q. of which, boiled 10 min. with 15 cc. 20% HCl, evapd. in vacuo, and crystd. from C6H6 + MeOH gives 1.6 g. I, m. 148-50.degree. (from MeOH). Extg. the mother liquid with EtOAc gives a small quantity of an isomer of III, m. 83-4.degree.. I is also prepd. in 69% yield by shaking III with 5% Pd on charcoal in EtOH under 50 lb. H pressure. It gives a red color with FeCl3 in EtOH and forms a Cu salt, (C5H4O2N)2Cu, m. 298.degree. (decompn.). I 3 g. in AcOH 15 cc. with Br 4.3 g. in AcOH 20 ml. at room temp. during 2 hrs. gives on evapn. in vacuo 0.65 g. of a Br deriv. of I, m. 208-9.degree.. I 3.1 g. gives with HNO3 2 in AcOH 15 cc. 67% orange crystals of a nitro deriv., m. 198-9.degree.. 3-Hydroxypyridine gives with 1.5 equivs. BzO2H in CHCl3 in

12-16 hrs. at room temp. 65% 3-hydroxypyridine 1-oxide, m. 189-91.degree. (from MeOH). Refluxing 4-(1-pyridyl)pyridinium dichloride 65 with Na 13 g. in PhCH2OH 400 cc. 4 hrs., pouring into H2O, extn. with Et2O, and fractionation gives an oil, b4 147-60.degree.; redistn. gives 11.5 g. 4-benzyloxypyridine (IV), b4 155-60.degree., m. 55-6.degree.; picrate, m. 150-1.degree.. Oxidation of IV with BzO2H gives 4-benzyloxypyridine 1-oxide, m. 178-9.degree., reduced with Pd and H to 1-hydroxy-4(1H)-pyridone, m. 238-40.degree.. Carbostyril gives with BzO2H in CHCl3 gives in 7 days on evapn., extn. with NaHCO3 soln., pptn. with HCl, and crystn. from C6H6 1-hydroxy-2(1H)-quinolone, m. 190-2.degree.. By analogous procedures are prepd. 1-hydroxy-4-methyl-2(1H)-pyridone m. 129-30.degree.; 1-hydroxy-5-bromo-2(1H)-pyridone, m. 155-7.degree.; 2-benzyloxy-5-bromopyridine 1-oxide, m. 127-8.degree.; 1-hydroxy-3,6-di-sec-butyl-2(1H)-pyrazinone, from 2-chloro-3,6-di-sec-butylpyrazine.

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SESSION |
|--|---------------------|------------------|
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| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| CA SUBSCRIBER PRICE | ENTRY
-5.29 | SESSION
-5.29 |

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LAST RELOADED: Jun 15, 2001 (20010615/UP).

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ENTRY | TOTAL
SESSION |
|--|---------------------|------------------|
| FULL ESTIMATED COST | 0.00 | 145.71 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE
ENTRY | TOTAL
SESSION |
| CA SUBSCRIBER PRICE | 0.00 | -5.29 |

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